



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,684	12/31/2003	George Fitzmaurice	1500.1088	1977
21171	7590	09/08/2006		
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			EXAMINER GOKHALE, SAMEER K	
			ART UNIT 2629	PAPER NUMBER

DATE MAILED: 09/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/748,684	Applicant(s) FITZMAURICE ET AL.	
	Examiner Sameer K. Gokhale	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22 is/are allowed.
- 6) ☒ Claim(s) 1-15, 17-21 and 23-29 is/are rejected.
- 7) ☒ Claim(s) 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 13 and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 13, the phrase "a default control is positioned under the cursor" on lines 1-2 renders the claim indefinite because it is unclear whether the default control is always under the cursor, and follows it, or if it is only at a particular instance.

Regarding claim 28, the phrase "plural users are allowed to make strokes" on line 1 renders the claim indefinite because it is unclear if plural users means multiple users using a device simultaneously, or if it means different users using the device individually at separate times.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-9, 26, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Ono (US 5,559,944).

Regarding claim 1, Ono teaches a display, comprising: a control zone for a function of an interface (Fig. 6, where the arc-aligned menu items are in the control zone); and an interface element graphic (Fig. 6, where the group of arc-aligned menu items constitute the interface element graphic) aligned with the control zone (Fig. 6) and indicating the function (Fig. 4, each menu item shows its corresponding function) with the interface graphic and control zone aligned to a natural user motion (Fig. 6 and 7, see col. 3, lines 16-24).

Regarding claim 2, Ono teaches a display wherein the alignment orients the graphic and zone with the motion (Fig. 6 and Fig. 7, see col. 3, lines 16-24, where the menu, which comprises the graphic and the zone is aligned along the arc created by the user motion).

Regarding claim 3, Ono teaches a display wherein the alignment follows the natural user motion (see col. 3, lines 16-24).

Regarding claim 4, Ono teaches a display wherein the alignment positions the graphic and zone at a location accessible via the natural user motion (Fig. 6).

Regarding claim 5, Ono teaches a display wherein the natural user motion comprises a curve determined by a stroke of the user on the display (Fig. 7).

Regarding claim 6, Ono teaches a display wherein the curve includes natural motion variations (Fig. 7, if the curve is made the user performing a natural motion then it inherently includes natural motion variations).

Regarding claim 7, Ono teaches a display wherein the user natural motion stroke comprises one of an elbow motion curve, a wrist motion curve, a finger motion curve, a shoulder motion curve and a combination of two or more of the curves (Fig. 7, and see col. 2, lines 5-7, where it is clear that the motion depicted here involves at least an elbow motion curve).

Regarding claim 8, Ono teaches a display wherein the curve is a curve determined by a single user (Fig. 7, where a single user's hand is shown here).

Regarding claim 9, Ono teaches a display further comprising an interface location at which the zone and graphic are positioned (Fig. 6, where the interface is the menu along the arc and it is where the zone and graphic are positioned).

Regarding claim 26, Ono teaches a method, comprising: allowing a user to make strokes with an input device (Fig. 7); determining an arc from the strokes (Fig. 7); and laying out a graphical user interface to conform to the arc (see col. 3, lines 16-24).

Regarding claim 29, Ono teaches an apparatus, comprising: a display (Fig. 6); and a computer (see col. 7, lines 22-23) producing an arc shaped graphical user interface on the display where the arc of the shape is defined by a natural user motion (Fig. 6 and 7, see col. 3, lines 16-24).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 10-12, 14, 15, 17-21, 23-25, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ono.

Regarding claim 10, Ono teaches the limitations of claim 9 as discussed above, however, and Ono further teaches a display wherein the interface location is specified by the target placement of the stylus positioned by the user (Fig. 6, see col. 6, line 16, where the menu is a pull-down menu meaning that the interface location is specified by the placement of the stylus). However, Ono does not explicitly teach a display wherein the interface location is specified by a cursor positioned by the user.

However, Official Notice is taken that it would have been obvious to one of ordinary skill in the art at the time of the invention to position a cursor to specify an

interface location in Ono's display because it is well known in the art to use a cursor as the visual indicator of the target placement of the user's selection on a display.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ono.

Regarding claim 11, Ono teaches a graphical user interface, comprising: a function control (Fig. 6, where the arc-aligned menu group is the function control) positioned on the display responsive to the location of the user stylus (Fig. 6, and see col. 3, line 16, where a pull-down menu means the menu position is responsive to the location of the user stylus), having a interface graphic indicating a function of the control (Fig. 6, the image of the menu group indicates shows its functions) and having a shape conforming to a motion arc of a hand caused by motion of an arm about an elbow of the user (Fig. 6 & 7, see col. 3, lines 16-24).

However, Ono does not explicitly teach a cursor positioned on a display by a user at a location. However, Official Notice is taken that it would have been obvious to one of ordinary skill in the art at the time of the invention to include a cursor in the graphical user interface of Ono because such a cursor is well-known and commonly used in the art for indicating a target point for a user selection.

Regarding claim 12, Ono further teaches an interface wherein the control comprises plural controls and the controls are aligned along the arc (Fig. 6 shows plural menu items, and hence plural controls along the arc).

Regarding claim 14, Ono further teaches an interface wherein the controls can be one of re-oriented and moved (see col. 3, lines 16-24, where it is inherent the controls can be re-oriented according to a new user-specified arc).

Regarding claim 15, Ono further teaches an interface wherein the controls are one or oriented and shaped to conform to a wrist arc caused by a hand moving about a wrist of the user (see col. 3, lines 16-24, and see col. 2, lines 5-7).

Regarding claim 17, Ono further teaches an interface wherein the control comprises plural controls (Fig. 6) and the shape of the sides of each of the controls is one of rectilinear, arc shaped, wedge shaped and triangular shaped (Fig. 6 shows rectilinear shaped plural controls).

Regarding claim 18, Ono further teaches an interface further comprising an overflow interface positioned responsive to the motion arc (Fig. 6, see col. 3, lines 16-24, where a pull-down menu is a type of overflow interface because it overflows from the main items shown along the right side of the display).

Regarding claim 19, Ono further teaches an interface wherein text of the control is rectilinear aligned with a display (Fig. 6 shows the text aligned rectilinear to the display).

Regarding claim 20, Ono further teaches an interface wherein the overflow interface is natural motion arc shaped (Fig. 6, the overflow pull-down menu is shown in a shape aligned to the natural motion arc).

Regarding claim 21, Ono further teaches an interface wherein the control is oriented to an extended arc (Fig. 7, see col. 3, lines 16-24, where the arc shown can be considered "extended").

Regarding claims 23 and 25, Ono teaches a method and a computer readable storage for controlling a computer, comprising: positioning an arc shaped graphical user interface (Fig. 6, the pull-down menu conforms to the arc as shown) responsive to the position where the arc of the shape is defined by a natural user motion (see col. 3, lines 16-24).

However, Ono does not explicitly teach determining a position of a cursor as designated by the user. However, Official Notice is taken that it would have been obvious to one of ordinary skill in the art at the time of the invention to include positioning a cursor as designated by the user in the method of Ono because such use of a cursor is well-known and commonly used in the art for indicating a target point for a user selection on a display.

Regarding claim 24, Ono further teaches a method further comprising determining whether the user has specified a custom arc (see col. 3, lines 16-24) and

positioning one of a custom and standard arc shaped interface responsive to the determination (see col. 3, lines 16-24, where the custom arc shaped interface is positioned).

Regarding claim 27, Ono teaches the limitations of claim 26 as discussed above, and Ono further teaches determining a position of a target on the display specified by the user (Fig. 6, where the target is determined by the stylus position); and positioning the interface responsive to the position (Fig. 6, see col. 3, line 16, where the menu's position appears as a pull-down menu in response to the user making a selection with the stylus at a location); and allowing the user to activate a function of the interface (Fig. 6, where it is clear that the user can activate one of the menu functions). However, Ono does not explicitly teach determining the position of a cursor specified by the user.

However, Official Notice is taken that it would have been obvious to one of ordinary skill in the art at the time of the invention to determine the position of a cursor in the method of Ono because it is well known in the art to use a cursor as the visual indicator of the target placement of the user's selection on a display.

Allowable Subject Matter

6. Claim 22 is allowed.
7. Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter:

Relative to independent claim 22 the major difference between the prior art of record (Ono) and the instant invention is that the said prior art does not have controls aligned along the motion arc and controls aligned along a counter arc intersecting the motion arc at 90 degrees.

Relative to dependent claim 16, the major difference between the prior art of record (Ono) and the instant invention is that the said prior art does not have control comprising plural controls and the controls are aligned along an arc intersecting the motion arc at 90 degrees.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Iwema et al. (US 7,058,902) teaches a pop-up menu in an arc shape. Anderson et al. (US 5,828,360) teaches a menu shaped in an arc for natural user motion. Driskell (US 6,883,143) teaches a menu shaped in an arc. Easty (US 6,448,987) teaches a menu shaped in a circle.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sameer K. Gokhale whose telephone number is (571) 272-5553. The examiner can normally be reached on M-F 8:00 AM - 4:30 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SKG
September 1, 2006

Sameer Gokhale
Examiner
Art Unit 2629

AMR A. AWAD
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read "Amr A. Awad", with a long horizontal stroke extending to the right.